AD-A243 837

FTD-ID(RS)T-1369-90

# FOREIGN TECHNOLOGY DIVISION

"AERODYNAMIC FIGURE CAPTION"

(Selected Pages)

DTIC
ELECTE
JAN 16 1992
S B D

92-01381

Approved for public release;
Distribution unlimited.

# HUMAN TRANSLATION

FTD-ID(RS)T-1369-90 5 November 1991

"AERODYNAMIC FIGURE CAPTION" (Selected Pages)

English pages: 4

Source: Guoji Hangkong, Nr. 5, 1988,
pp. 67; 70-71

Country of origin: China
Translated by: SCITRAN
F33657-84-D-0165
Requester: FTD/TTTMM/Moorman
Approved for public release; Distribution unlimited.

| | |
|---|---|
| THIS TRANSLATION IS A RENDITION OF THE ORIGINAL FOREIGN TEXT WITHOUT ANY ANALYTICAL OR EDITORIAL COMMENT. STATEMENTS OR THEORIES ADVOCATED OR IMPLIED ARE THOSE OF THE SOURCE AND DO NOT NECESSARILY REFLECT THE POSITION OR OPINION OF THE FOREIGN TECHNOLOGY DIVISION | PREPARED BY:<br><br>TRANSLATION DIVISION<br>FOREIGN TECHNOLOGY DIVISION<br>WPAFB, OHIO |

GRAPHICS DISCLAIMER

All figures, graphics, tables, equations, etc. merged into this translation were extracted from the best quality copy available.

Accession For
NTIS GRA&I ☑
DTIC TAB ☐
Unannounced ☐
Justification
By
Distribution/
Availability Codes
Avail and/or
Dist Special
A-1

(page 1 of the original --)

Figure 2: Blade back flow spectrum for alpha=0° and I=0.53.

Figure 3: Blade bowl flow spectrum for alpha=0° and I=0.53.

Figure 4: Flow spectrum for alpha=10° and I=0.53.

Figure 7: Increase of whirlpool string for alpha=0° and I increases to 1.0.

Figure 8: Jet stream departs from blade back and appearance of whirlpool for alpha=10° and I=0.60.

Figure 9: The adherence of the jet streams of the first and second vent holes with blade back is better when alpha=-9° and I=0.28.

Figure 10: The adherence of the jet stream of the first vent hole with blade back is degraded and whirlpool appears when alpha=-9° and I=0.60.

(page 2 of the original --)

1. Outlook of the test laboratory
2. Flow-conducting sound-damping plate
3. Sound-absorbing wedge
4. Sound insulation room of the exhaust sound-absorbing tube
5. Outlet of exhaust sound-absorbing tube
6. Removable plate-type sound absorber (left side was closed and right side was opened)
7. Exhaust maze

(page 3 of the original --)

1. Outlook of test laboratory
2. Main control room, the data collecting system is on the left and on the right side is three PDP 11/73 computers
3. J-6 fighter awaits testing
4. J-6 fighter in fatigue test

(page 5 of the original --)

1. Combustion Turbine Research Institute
2. full size dual-shaft turbine composite testing equipment
3. single multiple-stage compressor testing equipment
4. high altitude station gas supply plant
5. high altitude simulation testing cabin
6. supersonic compressor plane-blade grid wind tunnel
7. supersonic air inlet simulation wind tunnel
8. high altitude station exhaust cooling system

(page 6 of the original --)

Figure 2: Y-7 assembly building of Xiane Aircraft Company

Figure 3: Overlay skin stretching machine

Figure 4: Microwave testing dark room

(page 7 of the original --)

Figure 1: Digital riveting machine

(page 8 of the original --)

Figure 2: DNC technology development

Figure 3: Scanning electron microscope

Figure 4: Large-scale hot pressing canister

Figure 5: Vacuum electrical furnace

Figure 6: Air-circulation quenching furnace

(page 9 of the original --)

Figure 1: Main laboratory of computer center

Figure 2: CAD design in the design center

(page 10 of the original --)

Figure 1: Full-scale measuring machine

(page 11 of the original --)

Figure 2: penetration detecting plant (interior view)

Figure 3: Circularity measuring device for high-precision parts

Figure 4: Electrostatic spray penetration detecting machine

(page 12 of the original --)

Figure 2: System dynamic simulation in the engine fuel system control laboratory

(page 13 of the original --)

1. Low-speed wind tunnel simulation test
2. Full craft turbine illustration by the 7-hole probe
3. High-speed wind tunnel open-hole wall

## DISTRIBUTION LIST

### DISTRIBUTION DIRECT TO RECIPIENT

| ORGANIZATION | MICROFICHE |
|---|---|
| B085 DIA/RTS-2FI | 1 |
| C509 BALL0C509 BALLISTIC RES LAB | 1 |
| C510 R&T LABS/AVEADCOM | 1 |
| C513 ARRADCOM | 1 |
| C535 AVRADCOM/TSARCOM | 1 |
| C539 TRASANA | 1 |
| Q592 FSTC | 4 |
| Q619 MSIC REDSTONE | 1 |
| Q008 NTIC | 1 |
| Q043 AFMIC-IS | 1 |
| E051 HQ USAF/INET | 1 |
| E404 AEDC/DOF | 1 |
| E408 AFWL | 1 |
| E410 ASDTC/IN | 1 |
| E411 ASD/FTD/TTIA | 1 |
| E429 SD/IND | 1 |
| P005 DOE/ISA/DDI | 1 |
| P050 CIA/OCR/ADD/SD | 2 |
| 1051 AFIT/LDE | 1 |
| CCV | 1 |
| PO90 NSA/CDB | 1 |
| 2206 FSL | 1 |

Microfiche Nbr: FTD91C000675
FTD-ID(RS)T-1369-90